



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,853	12/08/2003	Martin Schadt	08130.0051-01000	9438
22852	7590	04/15/2005	EXAMINER	
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			CHOWDHURY, TARIFUR RASHID	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary	Application No.	Applicant(s)	
	10/728,853	SCHADT ET AL.	
	Examiner	Art Unit	
	Tarifur R Chowdhury	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-59 is/are pending in the application.
- 4a) Of the above claim(s) 49-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-41 and 47 is/are rejected.
- 7) ☒ Claim(s) 42-46 and 48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/04/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 49-58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 01/21/05.

In response to applicant's remarks that the examiner failed to point out any basis for supporting the restriction of species, it is respectfully pointed out to applicant that claims 32-48 (species I) recites an optical component that has one structured retarder and one circular polarizer wherein claims 49-51 (Species II) recites an optical component including an optically anisotropic layer formed by liquid crystal molecules and contains fluorescent molecules and wherein claims 52-56 (Species III) recites an optical component containing a birefringent liquid crystal layer having two regions with different optical axes wherein the optical delay of the liquid crystal layer in the individual regions depends differently on an angle of observation and wherein claim 57 (Species IV) recites an element for protection against forgery or copying, being arranged on a substrate that is a reflective polarizer and comprising an optical anisotropic layer which has at least two regions with different optical axes and wherein claim 58 (Species V) recites a device for protection against forgery or copying comprising an element and an analyzer, wherein the analyzer and the element are arranged on a single substrate.

Accordingly, the restriction was proper and thus maintained.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/435,466, filed on 11/08/1999. ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 32-35 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schadt et al., (Schadt), USPAT 5,602,661.**

6. Schadt discloses and shows in Fig. 3, an optical component comprising at least two layers, one layer being a structured retarder (9) and the other layer being a polarizer (8), wherein the retarder (9) has at least two regions with different optical axes and comprises an anisotropic layer comprising cross-linked liquid crystal monomers (col. 8, lines 3-19). Schadt also discloses the linear polarizer (8) can be replaced by circular polarizers (col. 8, lines 32-36).

Accordingly, claims 32-35 are clearly anticipated.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any invention s covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 36-41 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schadt in view of Kameyama et al., (Kameyama), JP 09-304770.**

10. Schadt differs from the claimed invention because he does not explicitly disclose that two circular polarizers made of cholesteric layer are arranged one above the other, one of which rotates to the left and the other of which rotates to the right.

Kameyama discloses an optical element that uses a separation layer for circular polarized light. Kameyama also discloses that laminating plural cholesteric layers having different reflection wavelengths produces the separation layer and as for the cholesteric layers, a proper material which separates natural light into right-hand and

Art Unit: 2871

left-hand circular polarized light as transmitted light and reflected light can be used.

Kameyama further discloses that these cholesteric layers are laminated to obtain a wider wavelength range for the separation function (abstract).

Kameyama is evidence that ordinary workers in the art would find a reason, suggestion or motivation to use circular polarizers made of cholesteric layers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the optical component of Schadt by arranging two circular polarizers made of cholesteric layers one above the other, one of which rotates to the left and the other of which rotates to the right for advantages such as to obtain a wider wavelength range.

Accordingly, claims 36-39 would have been obvious.

As to claims 40 and 41, Schadt also shows in Fig. 3, that the optical component further comprising a linear polarizer (4).

As to claim 47, Schadt shows in Fig. 3, an external linear polarizer (4). As to using the optical element as an element for protection against forgery or copying and using the external polarizer for analyzing encoded information is considered as intended use and thus would have been obvious.

Allowable Subject Matter

11. Claims 42-46 and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2871

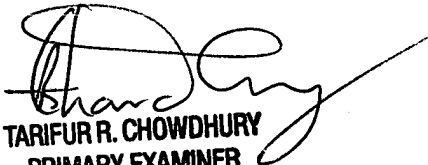
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R. Chowdhury whose telephone number is (571) 272-2287. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRC
April 12, 2005


TARIFUR R. CHOWDHURY
PRIMARY EXAMINER